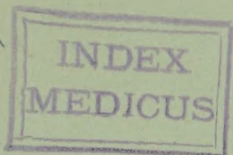


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A

HISTORY OF SURGERY

IN

SOUTH CAROLINA.

BEING THE ESSAY TO WHICH THE PRIZE, OFFERED BY DR. JOSEPH PRICE, OF
PHILADELPHIA, WAS AWARDED BY THE SOUTH CAROLINA
MEDICAL ASSOCIATION, APRIL, 1893.

BY

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THE STATE OF SOUTH CAROLINA.



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A HISTORY OF SURGERY IN SOUTH CAROLINA.

Being the Essay to which the Prize, offered by Dr. Joseph Price, of Philadelphia, was awarded by the South Carolina Medical Association, April, 1893.

By EDWARD FROST PARKER, M.D., Charleston, S. C.

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The march of civilization leads us on with such impetuous haste, that we seldom find time to review the life and works of our honored surgeons of the past, to sing their praises and gratefully acknowledge our indebtedness for their services to us and mankind; or even to reflect upon their contributions to surgery, the benefits of which we have reaped an hundredfold, and to whose ability and genius this branch owes its present position in the foremost ranks of medical science.

The history of American Surgery is a work of such magnitude that it were far better to put it together in parts than to build it as a whole.

This can be done only by local histories of the several States; much useful and interesting material has already been lost, more still is rapidly passing into oblivion, and much of great value has probably never been written, or has been destroyed. Even now a recurrence to tradition fails to elicit the quaint and seductive narratives which might easily in this way have survived.

But local histories have their purpose to subserve beyond the limit of a mere passing interest.

Our country, growing greater and grander every day, is still made up of people differing in habits, tastes and acquirements, and if these are to be merged into one glorious whole, each part should still have its own distinctive individuality, as a means of stimulating a generous rivalry, and as an incentive to further perfection.

America has, in the short period of her existence, contributed far more than her just and relative quota to the general history of the world's surgical achievements, and in this great result each State should claim the laurels she has won.

The skill and utility of the surgeon have at all times been fully recognized, and centuries still attest the truth of the oft-quoted lines, sung in immortal Homeric verse :

"A wise physician skilled our wounds to heal
Is more than armies to the public weal."

Now, from the discovery of the American Continent, in 1492, until the War of the Revolution, one century ago, the brilliant pages of surgical history are not illumined by Columbia's sons, and in the long list of surgeon-immortals America is conspicuous only by the absence of even a single name.

Since that time, however, the two greatest discoveries in the history of surgery—anæsthesia and antiseptis—have been made, and we divide these honors with the nations of the globe. In the discovery of anæsthesia, America has created a distinct surgical epoch—the era of anæsthesia—which will stand through the centuries to come—a fitting monument to our industry and ability.

With the birth of the present century, ushered in as it was on the wings of a glorious and unprecedented independence, our country has rapidly taken the lead in the steady march of progress in surgical science which has signalized this epoch, and still fresh and vigorous with youthful life, bearing blushing honors full upon her, now outshines in the brilliancy of her surgical triumphs the aged nations of the civilized globe.

Were I to claim for South Carolina all that her sons have achieved in this glorious result, or even to claim for her only the creative genius of one of them, her place on the topmost round of the ladder of fame would remain unchallenged by the world at large. But the limit of this essay is plainly expressed in the words of the title suggested by the generous, gifted and distinguished surgeon, Dr. Joseph Price, of Philadelphia, who offers his prize for the best essay on the "History of Surgery in South Carolina," which I judge does not include those surgeon-sons of the old Palmetto State, who have doubly honored their proud mother by largely making the history of not a few of her sister States, but whose work does not properly come within the scope of this article.

Hence we propose only to consider the history of surgery as developed on South Carolina soil, and simply to pay passing tribute to those of her distinguished surgeons who, seeking their fortunes, have won the smiles of fame in other climes, whose skies looked brighter than their own.

The writer, upon beginning this undertaking, has no friendly guide to light his path, for, so far as he knows, this is the first attempt to classify and group our own achievements in an orderly way, so as to view them as a whole, and estimate their influence upon the progress of American surgery.

The subject is vast, the material for reference scant and hard to find; these circumstances and the fact that he was able to get answers only from a few professional men, whom he addressed by letter, make the result almost wholly a matter of personal effort and research, and for these reasons he must beg the kindly criticism of his readers.

From the first settlement of South Carolina, in 1690, until the year 1790, we have but few records of medicine, and in the knowledge of the writer none on the subject of surgery proper.

The explanation of this curious coincidence lies probably in the fact that our State was then, and for so long afterwards, the scene of those pestilences, epidemic and endemic, which almost rivalled in severity and disaster the "Seven Plagues of Egypt." Our early physicians, though undoubtedly men of the first rank in intelligence and ability, were so busy in studying the different phases of disease, under the new and strange climatic influences, which offered such a wide field for observation and research in investigating the etiology and prophylaxis of these terrible annual epidemics, and in adapting their treatment to these changed conditions of every kind, that surgery was a subject of minor importance.

The crude condition of life in the colonies reduced the number of surgical accidents, no doubt, but the fierce and cruel wars waged with the savages and Spaniards, during the periods of proprietary and regal government, between the years 1670 and 1776, must have furnished a wide range of surgical practice of which there is no record, while it must have rendered a knowledge of its principles indispensable.

Be this as it may, the following two references to surgery, while at the same time interesting, may shed some light upon the early difficulties which were successfully overcome, and the boldness and daring spirit of our American people, as also upon the nature of some surgical practice, and the methods obtaining at that time.

In 1730 we find recorded as an evidence of extreme and generous loyalty that "six chiefs laid the crown of their nation and the scalps of their enemies at the feet of King George," and in the year 1779 history records: "A man living in Orangeburg, whose leg, after being horribly mangled, had been successfully amputated several years before by one of his neighbors with a common knife, carpenter's saw and tongs—the last instrument was applied red-hot to stop the bleeding. The stump was far from elegant, but, with the help of a wooden leg, the patient enjoyed all the advantages which are secured by the most dexterous performance of amputation. There was no surgeon within sixty miles of the sufferer."

In 1809 Dr. David Ramsay, of Charleston, published his history of South Carolina, a work of inestimable value, adding lustre to an already brilliant

name, and creating for himself a somewhat unique position in the annals of our profession by uniting in his own person the skillful physician and the renowned historian.

In the second volume of this work considerable and appropriate space is given to a "Medical History of South Carolina," from which the above references were obtained. While this deals more with the meteorological observations on the climate, rainfall, etc., and with the problems of medical, rather than surgical disease, we cannot forbear making some extracts as indicative of the relative status of surgery in those days.

In 1802 Dr. Ramsay mentions that he successfully vaccinated his son Nathaniel, this being the first surgical inoculation for the prevention of small-pox in South Carolina. Occurring only four years after Jenner had published its efficacy for that purpose, and while his theory and practice were yet the subject of the most bitter vituperation and suspicion, it is indeed notable.

Gravel and nephritic complaints he notes as comparatively rare, and he mentions among only three lithotomies up to his time performed in South Carolina, a successful case by Dr. Joseph Glover, which will be referred to again.

"The eighteenth century was more than half elapsed before the Carolinians undertook to educate their sons for the practice of physics, or before any native of America had established himself in South Carolina as a practitioner of medicine."

William Bull and John Moultrie were among the first native Carolinians to obtain the degree of Doctor of Medicine in 1734 and 1749, respectively. After the Revolutionary War this number rapidly increased.

"In the infancy of Carolina there were more experiments made, more observations recorded and more medical writings ushered into public view by the physicians of Charleston than of any part of the American Continent." The practice of surgery was regulated by Heister and Sharp, and the improvements made by Pott, Hunter, Hey and others were all transplanted into South Carolina.

He closes this admirable epitome of our medical history with this sentence: "Carolina, by her Linning, Chalmers and Garden, has increased the stock of medical and philosophical knowledge, but cannot, like Pennsylvania, boast that she has produced a Rush, a Barton and a Physick, raised up for the advancement of the healing art and of the auxiliary branches of medical science. Her practitioners, though they have not originated improvements in medicine, deserve well of their country, for they have been ever attentive and among the first to enrich it with the medical discoveries of the old and new world."

Dr. Ramsay's history stops in the year 1808, and since that time South Carolina has produced the peers of Rush, Barton and Physick, and I propose to show, not only that she has a surgical record of which she may well be proud, but that American surgery owes some of its brightest pages to the genius of her sons.

The above sketch, in addition to Shecut's Medical and Philosophical Essays, published in 1819, are, so far as we can learn, the only two attempts that have been made to perpetuate the history of medicine in South Carolina.

In the latter I find no reference to surgery, and only mention it as an evidence of a laudable desire to preserve to posterity the seemingly short and simple annals of an interesting period in our medical history. The next factor in the development of surgery in the State to be considered, and a very important one, was the establishment, in 1789, of the Medical Society of South Carolina, as it was through this agency that our earliest surgical triumphs were recorded and preserved. Space forbids me from paying a fitting tribute to this historic Society, one of the earliest organizations in America, the object of which was to further the interest of Medicine and Surgery by recording the results of original work, and which still survives to-day, after more than a century of active busy existence.

Eminent as were the members of this Society, most of them being literateurs as well as accomplished physicians, none, apparently, had devoted much attention to surgery. About the beginning of this century, among the honored names of Peter Faysoux, Ramsay, Chalmers, Dalcho and a host of others, at whose mention hallowed memories of the past crowd into our minds, we find that of Joseph Glover. Graduating in 1800 from the University of Pennsylvania, with great distinction, he won notice at once by his thesis on "Digestion," which was published among Dr. Caldwell's "Selected Theses," which, "considered as separate specimens of intellect and investigation, do great credit to the individual writers." Returning to his native city, Charleston, with a passion for surgery, he commenced practice at a juncture peculiarly favorable to rapid success in this line. Frequent opportunities occurred for the exhibition of his judgment, boldness and skill, and in a few years his reputation as a surgeon was established. An interesting sketch of his life and works is to be found in Stephen B. Williams' "American Medical Biography, or Memoirs of Eminent Physicians," published in 1845, and from which I will draw very freely.

In 1840 a committee of three, of which Dr. John Bellinger was chairman, was appointed to prepare an account of the more important facts which occurred in the practice and the principal operations performed by Joseph Glover, M.D. The following are some facts abridged from this report:

One of the first capital operations he performed was the rare one of excising the spleen. The patient, a negro, belonging to Major Pinckney, was stabbed by a knife on August 12th, 1801. The weapon penetrated obliquely the hypochondriac region, making a wound 4 1-5 inches in length, the cartilage of one or two of the false ribs was divided, and some of the omentum, together with a considerable portion of the spleen, protruded. When Dr. Glover saw him the next morning, he excised a large part of the spleen, a large portion of omentum, and secured a branch of the splenic artery with a ligature. The remaining parts were properly cleansed and returned to the abdominal cavity. The wound was closed with interrupted sutures.

In some of its circumstances this case resembles the one reported by Chelsenden, Volume XI. of the Philosophical Transactions. This successful case attracted much attention both at the time and since.

The next important operation he performed was lithotomy. Calculus diseases

were so rare at that time that to have cut for stone was a fortunate distinction few surgeons enjoyed. As late as 1808 only three operations of this kind could be distinctly and certainly recollected as having been performed in Charleston. Two of these were done by Dr. Turner, of Connecticut, by invitation for the purpose; the third was by Dr. Glover.

Dr. Glover also excised "an inverted uterus measuring 11 inches in length, 18 inches in circumference and weighing five pounds, with rapid recovery." He relates as proof of the fact of its being the uterus that in 1834 he had visited his former patient, whom he found in good health, and that he was assured that she had never menstruated since the operation. The committee then give the details of the operation, which are too long to insert here, but which are reported in the fourth volume of the *American Medical and Philosophical Register*.

Dr. Glover also gained reputation by reviving as a cure for hydrocephalus the operation of puncture of the head and subsequent compression. The history of Dr. Glover's case was published in pamphlet form by the Medical Society in 1818. It was quoted by medical and scientific journals all over the world. In the *New York Medical Journal* for 1818 we find this: "We are indebted to that ancient and respectable institution, the Medical Society of South Carolina, for the publication of this case, which extends the practical domain of surgery."

In the *Archives General* for 1832, Bricheateau gives Glover priority in the use of compression by the bandage for the cure of hydrocephalus.

Dr. Frederic S. Dennis, of New York, to whom I owe many thanks for the assistance his work has given me, in an admirable, able and most praiseworthy address on the "Achievements of American Surgery," to be found in the *New York Medical Record*, December, 1892, says: "The operation of hysterectomy is one that was performed very early in the history of this country, since it has been ascertained that, in 1813, Joseph Glover, of South Carolina, removed the entire uterus, and the patient made a complete recovery. This operation occurred just four years subsequent to McDowell's first ovariectomy." I quote thus at length on account of Dr. Glover's career, as he occupies a unique position, being the first surgeon in South Carolina whose achievements merit notice, or of whose works we have an authentic record.

"In 1816 John King, of South Carolina, in the case of an extra-uterine pregnancy, by opening into the pelvic cavity by the side of the vagina and extracting the foetus with forceps." A report of this case was published in the *Medical Expository* of New York of 1817, under the title, "Case of extra-uterine foetus produced alive through an incision made into the vagina. The mother recovered without any alarming symptoms."

Dr. Dennis again says: "In the surgery of the spleen Americans have a record of which they need not be ashamed. In reviewing the literature of splenectomy the case of Zaccarelli may be excluded, Sir Thomas Wells says, as apocryphal. The next authentic case is one by Quittenbaun, of Rostock. This was performed in 1826, and the patient died. But in 1801, a quarter of a century previous to this case, Dr. Jos. Glover, of Charleston, S. C., removed

nearly the entire spleen, the omentum, and ligated a branch of the splenic artery."

From this I gather that to Dr. Glover is due the credit of the first successful splenectomy in the world's history, thus demonstrating an important principle which has had no mean influence in shaping the destiny of splenic surgery.

In 1823 Dr. E. D. Smith, of South Carolina, was engaged in the translation of the writings of the great French surgeon Desault for the benefit of American surgeons. This was the first of the many praiseworthy ways in which Americans largely made use of the knowledge of other nations and appropriated it to their own use, and it is creditable that a Carolinian was the first translator of foreign surgical literature.

Dr. Benjamin Bonneau Simons merits attention as the next surgeon, chronologically, whose name is associated with several original operations, but of his work we can find no positive record. Educated in Edinburgh under the famous Abernethy, he returned to Charleston and practiced surgery extensively until his death, in 1844. He was the author of a work on the "Surgery of Bones," in which field he was the pioneer in this State, we are told, being the first surgeon to trephine the skull.

His many queer traits of character have left behind some amusing stories which still survive to tell of his prowess and perpetuate his memory as a surgeon.

With these glorious and wonderful exceptions, the writer has been able to find no records of surgery until the establishment of the Medical College of the State of South Carolina, in 1822, under the fostering care of the Society, when we have recorded a long list of many brilliant men who at various times filled the important chair of surgery. The names of many of America's sons are indissolubly linked with her history. The first name registered in the pages of her matriculation book was that of Eli Geddings—a household word in South Carolina—and of whom we will speak more at length hereafter.

In 1821 Drs. William Michel and Thos. Y. Simons started a medical journal, which would have been an invaluable record of our surgery and surgeons of this period, but only a few numbers were issued when unmerited failure overtook it.

Again, in 1846, the *Charleston Medical Journal and Review* was established. Mention was made of these, as it was mainly by such means that our surgical progress has been preserved for all time. One of the originators of this journal, Dr. Lawrence Smith, was a man of wonderful genius, who, on leaving his native State, was appointed geologist to the Sultan of Turkey, and was finally crowned by "the highest honor within the gift of the scientific world"—election to the Institute of France.

Though prior to 1846 there were only three books on surgery printed by American authors, according to Dennis, we find that a work on surgery, by Dr. T. L. Ogier, of Charleston, was published about 1834. This book, though not well received, still reflects credit on the energy and originality of its author. Its pages savored too much of French and too little of American style and method to suit our patriotic taste, its gifted author having received the major part of his education in foreign schools.

In 1858 the lectures of Professor Eli Geddings, then Professor of Surgery in the Medical College of the State of South Carolina, were published.

Dr. Geddings at that time was well known throughout the United States as an able, aggressive and successful surgeon. Very few of his cases were reported, though he was for years one of the editors of the *American Journal of the Medical Sciences*, then the leading medical periodical of this country.

In 1862 a "Manual of Military Surgery, for the Use of Surgeons in the Confederate Army," was written by Dr. Julian J. Chisolm. This book was pronounced by Gross and other prominent surgeons of that time as the best work that had appeared on the subject. Dr. Chisolm was then Professor of Surgery in the Medical College of the State of South Carolina. Removing shortly after to Baltimore, he has achieved an international reputation for his work in ophthalmology, and has enjoyed all the professional honors this country can bestow.

In 1848 the South Carolina Medical Association was organized in Charleston, and, except during the war, has been in active existence ever since. The proceedings of this Association and the files of the *Charleston Medical Journal and Review*, from this point form the chief sources of my information.

The discovery of anæsthesia, in October, 1846, by Morton, of Boston, was by far the greatest event which has ever occurred in the history of surgery, and yet, astonishing as it may seem, the use of the anæsthetic apparently crept into South Carolina with slow and noiseless steps, for I find in the current literature scarcely any notice of its introduction.

Since writing the above, my attention has been called to the report of a committee consisting of Drs. J. R. Bratton, B. W. Tayler and C. R. Faber, appointed by the South Carolina Medical Association, "to investigate the claims of the original discoverers of the anæsthetic properties of ether and its successful application in surgical operations" (Transactions South Carolina Medical Association, April, 1883), and which had escaped my notice. The name of Dr. P. A. Wilhite, of Anderson, is now commonly associated with the other claimants, but is usually coupled with that of Dr. Long.

This committee reach the following conclusions in an interesting article :

1. That for more than fifty years the inhalation of sulphuric ether, as an excitant, was common in some parts of Georgia, though not practiced in the colleges.
2. That Wilhite was the first man to produce profound anæsthesia, which was done accidentally in 1841.
3. That Long was the first man intentionally to produce anæsthesia for surgical operations, and that this was done with sulphuric ether in 1842.
4. That Long did not by accident hit upon it, but that he reasoned it out in a philosophical and logical manner.
5. That Wells, without any knowledge of Long's labors, demonstrated in the same philosophic way the great principle of anæsthesia by the use of nitrous oxide gas, in 1844.
6. That Morton, desiring to use the gas in dentistry, asked Wells to show him how to make the gas in 1846.

7. That Wells referred Morton to Jackson for this purpose, as Jackson was a scientific man and an able chemist.

8. That Jackson told Morton to use sulphuric ether instead of gas, as it possessed the same properties, and was safe and easy to get.

9. That Morton, acting upon Jackson's suggestion, used the ether successfully in the extraction of teeth in 1846.

10. That Warren, Haywood and Bigelow performed important surgical operations in the Massachusetts General Hospital, October, 1846, on patients etherized by Morton, and that this introduced the practice throughout the world.

The following is a quotation from Lauder Brunton's "*Materia Medica*," page 192: "The properties of this gas (nitrous oxide) and also of ether vapor to produce excitement when inhaled, caused these substances to be used in sport, and during their action bruises were frequently received but not felt.

"This circumstance excited the attention of Dr. Crawford W. Long, of Athens, Ga., and in 1842 he anæsthetized a patient with ether in order to remove a tumor. He was encouraged to do this by the fact that Dr. Wilhite, in a frolic, had rendered a negro boy completely insensible without any bad results."

"Morton used ether in dentistry (in 1846), and induced Drs. Warner, Haywood and Bigelow to perform important surgical operations on patients whom he anæsthetized with it. From this time onwards anæsthesia has been regularly used in surgical operations."

I am indebted to Dr. James Evans, of Florence, for some interesting information in this connection. The negro boy to whom Dr. Wilhite administered the ether became so profoundly insensible that the Doctor, thinking that he would not recover from the anæsthetic, had his horse saddled and intended to escape into Tennessee. He also writes that "Dr. Wilhite's claims were carried before the Senate in 1853, which body was so impressed by the justice of his claims that the House bill making the appropriation to Morton was killed."

Public opinion is still unsettled, the world is still in doubt, and the claimants having all passed away, the true decision as to whom the honor for the discovery of anæsthesia is due, must rest on the impartial judgment of future generations. The basis of such decision must rest, it seems to the writer, upon the accepted meaning of the word discoverer or inventor.

Sidney Smith, the great literary genius of his day, says that "he is not the inventor who first says the thing, but he who says it so long, so loudly and so clearly, that he compels mankind to hear him."

"No stately pyramid, whose towering height shall pierce the stormy clouds," could properly measure or express the debt of gratitude the world owes to the discoverer of anæsthesia, nor will he need one to "tell posterity his fame."

If truth decrees that the world is indebted to Wilhite for the discovery of anæsthesia, then will our cup of gratitude and honor be full indeed.

In May, 1847, Dr. Henry R. Frost described an amputation of the leg with letheon (ether), given by a dentist (Dr. Solomon), and says it is superior to any means yet proposed for destroying sensibility. Dr. T. L. Ogier, in the same year, used it in a case of traumatic tetanus. Dr. Michel relates to me that, in

1847, it was given before the class of the Medical College, to a patient on whom he was to operate, by a Dentist named Dr. Bissell. In this case a patent glass inhaler was used for which Dr. Bissell had paid \$50. This was probably the first public demonstration of its use. To whom belongs the priority for its first application in South Carolina I cannot decide. It is curious to note, however, that in both instances it was given by dentists who had purchased a license to use it, and that at this date they were better acquainted with its use than the surgeons who experienced its advantages.

Now, following the classification of Dr. Dennis, I shall consider, in tracing the progress of Carolina surgery (1) Surgery of the great cavities of the body; (2) Surgery of the bones and joints; (3) Surgery of the vascular system and nerves; (4) Surgery of the genito-urinary system; (5) Miscellaneous operations.

It was my purpose to report in full many of the cases which are here noted, and also to quote other interesting cases which, though creditable to the author, still showed no originality, but, finding this would make my essay too voluminous, I intend only to mention those surgical operations which have had some distinct bearing upon the progress of the art in our State.

I. SURGERY OF THE GREAT CAVITIES OF THE BODY.

Dennis ascribes the first case of trephining for epilepsy to Dudley, of Kentucky, about 1828. The next operator, he says, is Warren, who in 1849 trephined for idiotism.

As early as 1836 Dr. John Douglass, of Chester, S. C., trephined for epilepsy in a lad 12 years old, the result of a blow on the head—the convulsions stopped and returned later. In 1839 he trephined a boy aged 16 for mental derangement, the result of a blow on the head fifteen years before. The relief in this case was permanent. In 1847 he again operated for convulsions with entire relief. Dr. John T. Darby, of Columbia, also trephined for epilepsy as early as 1874, and E. B. Turnipseed in 1876. Since that time it has been frequently done in South Carolina for all the conditions requiring it.

Dr. Douglass consequently deserves to be ranked among the first of those who trephined for the cure of this disease, not only in South Carolina, but in America, and as such deserves great credit, which has not hitherto been accorded to him.

Dr. Harris, of Philadelphia, up to 1884, had collected and reported statistics on only 136 cases of Cæsarean section; one of these was performed by Dr. J. W. Hill, of Edgefield, as early as 1869, and was successful, both mother and child being saved.

Dr. E. Miller, of Florence, again reports, in 1835, a case which died on account of previous rupture of the uterus.

Dr. Cornelius Kollock, of Cheraw, in 1892, reports the third case in South Carolina which was successful, mother and child both being well and alive seven months after operation. Dr. Kollock, in August, 1892, again operated successfully.

Histories.—Case I., black woman, aged 30, second labor; conditions, vaginal stenosis and vesico-vaginal fistula, the result of previous labor.

After twenty-eight hours of labor, no change taking place, operation was performed by the usual incision, and twelve days after, being perfectly well, professional care was discontinued.

In Case II. rupture of uterus was the cause of the operation and the cause of its fatal result.

In Case III. pelvic contraction was found, the conjugate diameter being only 1½ inches. Sanger's improved operation was performed in forty-four minutes, and was very successful.

In Case IV. a similar operation was done, and both mother and child saved.

These cases, the only four recorded in South Carolina, would seem to prove that pelvic contractions are rare, or that craniotomy was and is extensively practiced. Dr. Eli Geddings is also said to have performed it here about 1850. Dr. Hill's case was among the earliest recorded in America, and was the first in South Carolina.

I have already mentioned that Glover, in 1813, was the first surgeon in America to perform hysterectomy. In 1847 Dr. John Bellinger performed abdominal hysterectomy, though the case resulted in death.

In 1854 Dr. Eli Geddings again removed the entire uterus in a case of inversion, the pedicle being ligated with strong silk; and in 1868 it was done by Dr. John T. Darby, of Columbia.

In 1847 Dr. Bellinger performed four laparotomies for ovarian, uterine and abdominal tumors, three of which were successful. It is peculiarly interesting to note that at this early date he advised exploratory incisions into the abdomen, and had practiced this method of diagnosis; and finding the condition too bad to proceed further, he closed the wound again.

Dr. Henry O. Marcy, of Boston, mentions in an article on "The Animal Suture; Its Place in Surgery," that "Dr. John Bellinger, of Charleston, S. C., in 1835, successfully performed ovariectomy, tying two arteries in the pedicle with animal ligatures" (*Am. Jour. Med. Sciences*, 1837, Vol. XXI., page 380).

This was one of the earliest attempts that was made to make use of those ligatures, which are now in such common use, and due credit is given to Dr. Bellinger in the able and exhaustive paper mentioned above.

Dr. P. G. DeSaussure reports to me a successful abdominal hysterectomy which he performed for the removal of an eight-pound uterine fibroid in 1886. The whole uterus, save three-quarters of an inch of the os, was removed, and the stump treated externally at the lower end of the incision; and also the successful removal by laparotomy of a sixty-two-pound ovarian cyst. The patient died thirty-two days after the operation, but was up and attending to business for some days.

These two cases are remarkable on account of the large and unusual size of the tumors requiring interference.

Laparotomy for the removal of abdominal and pelvic tumors and for the cure of the various other conditions and diseases of these cavities requiring operation,

has been performed in South Carolina a great many times, and with great success, in the last few years. Space and time forbid detailed mention of all the operations and operators. Among those who have reported cases are, Drs. Taylor, of Columbia; Miller, of Florence; Kollock, of Cheraw; Bratton, of Yorkville; Black, of Greenville; H. R. Black, of Wellford; Manning Simons, of Charleston; Kinloch, of Charleston; G. R. Dean, of Spartanburg; J. C. McMillan, of Marion, and E. Wasdin, of Charleston.

But special mention should be made in this connection of Cornelius Kollock and R. A. Kinloch, both of whom have operated a very large number of times, their cases embracing all the conditions for which laparotomy is undertaken, while both have been crowned with unusual and merited success and corresponding distinction.

Dr. J. L. Ancrum, of Charleston, in 1873, reports a "case of intussusception, operation of laparotomy in an infant two years and six months old, unsuccessful," and advocates very warmly operative interference in these otherwise fatal cases.

In a list of only 70 cases, the largest recorded up to that time, collected with great care and ability, and published in the *Charleston Medical Journal and Review*, by Dr. Francis L. Parker, this case is mentioned, and is certainly the first in this State. A few years later Dr. Kollock, of Cheraw, successfully relieved this condition by timely laparotomy.

Dr. R. B. Rhett, Jr., of Charleston, in 1889 and 1891, reports two cases of intra-ligamentary cyst successfully treated by iodine injections. This he claims as an original method, and as such deserves mention. Dr. Rhett, in 1892, also records a case of laparotomy in the puerperal condition performed ten days after delivery, pus being found in the tubes; the case ended fatally. This is among the few cases recorded where the abdomen has been entered so soon after parturition, and its expediency is still under discussion.

Cholecystotomy was first performed by Dr. Bobbs, of Indiana, in 1867, but the operation, so far as I can find, was not done in South Carolina till 1890, when Dr. Rhett operated in the case above mentioned with fatal results, labor coming on two days after; and again, in 1891, by Dr. J. L. Dawson, Jr., of Charleston, who removed the gall-bladder, with several large stones, successfully.

The operation of laparotomy for the treatment of penetrating gun-shot and stab-wounds, was the work of American surgery. Gross, in 1843, and Sims, just before his death, both suggested this method, but these gentlemen never practiced this plan of treatment.

The honor of first making practical application of the method was reserved for one of South Carolina's sons, and we point with the finger of pride to the name of R. A. Kinloch, of Charleston as the man to whom the credit is due for this great advance in surgery. Dennis admits that Kinloch was the first to perform this operation, but gives to Dr. W. T. Bull, of New York, all the credit for its introduction as a recognized surgical procedure. This case of Kinloch's is reported in the *American Journal of the Medical Sciences*, July, 1867. The subject was a Confederate soldier, who had been wounded in the abdomen some time previous. Dr. Kinloch performed laparotomy successfully in Summerville, resect-

ing the intestine and suturing it again with the object of restoring its continuity; the patient lived many years afterward.

He again operated in a case of gun-shot wound in 1882, in which the intestines were injured. This he treated by opening the cavity and suturing the bullet-openings, but it terminated fatally, because one perforation, found on autopsy, was overlooked. Dr. C. Kollock operated successfully in 1887 on a similar case, and so did Dr. Manning Simons in 1892, and doubtless some others who have not recorded their work.

Much controversy has arisen as to priority in this operation, the beneficial effects of which have been felt and experienced all over the civilized globe. The honor is well worth the contention. But while to Dr. W. T. Bull, perhaps, belongs the credit of establishing it as a recognized surgical procedure, the credit for its first performance must be given to Dr. Kinloch.

Another South Carolinian to whom great credit is due for pioneer work in abdominal surgery is Dr. J. McF. Gaston, now of Atlanta, who in 1859 united the intestines of a man who had removed, while under the mental hallucination of delirium tremens, three pieces of his small intestine, each some ten inches in length. These were subsequently preserved in the Museum of the Medical College at Charleston. This case was reported in the medical literature of that period and subsequently referred to in the *Southern Medical Record*, October, 1884.

These two cases, namely, that of Kinloch, in 1862, and Gaston, in 1859, have been continually confounded in every way. In Brant and Fuller's *Encyclopedia*, Volume I., page 331, we find the following: "Dr. Kinloch was the first surgeon in the world to open the abdomen as a restorative operation in cases of gun-shot wound, with a view to restoring the intestines, twenty years in advance of anyone else." The first assertion here is true, the latter false.

Dr. Gaston has also been credited with the priority instead of Dr. Kinloch, but the two cases are entirely different. "While in one the abdomen was opened and the intestine resected and sutured, in the other the three ends of the intestine dangled out of a small aperture in the abdominal parietes, and only required to be brought together to effect the continuity of the canal," as Dr. Gaston says in his own words.

The ends of the wounded intestine in Gaston's case were united with silver wire, and he argues that this suture "can be so moulded as to serve the end of a splint in maintaining exact apposition of the edges and yet not interfere materially with the general mobility of the intestinal canal."

These cases have lately occasioned much discussion in the *New York Medical Record* of December 3d, 1892, and January 14th and 21st, 1893, in connection with the address by Dennis.

In 1875 Dr. E. B. Turnipseed, of Columbia, operated on a case of apoplexy, thirty years after the fracture of the frontal bone, resulting in entire paralysis of the left arm and leg with epileptiform convulsions, with improvement in the use of the limbs." Dr. Turnipseed also invented at this time a number of ingenious instruments to facilitate the operation for vesico-vaginal fistula, which attracted much attention.

In 1878 Dr. Manning Simons operated on a case of imperforate anus, making an artificial opening at the sigmoid flexure just above Poupart's ligament, which was very successful, as the child is still living.

II. SURGERY OF THE BONES AND JOINTS.

In this department, Dr. R. A. Kinloch deserves special mention as the originator of the method of treating fractures of the lower jaw by suturing the fragments together, when retention by other means was impossible. This case was reported in the *American Journal of the Medical Sciences*, July, 1859. In Ashurst's *Encyclopedia of Surgery*, Volume IV., page 78, and in Agnew's *Surgery*, page 887, Dr. Kinloch is given full credit as the first to perform this operation, which has since been utilized in fractures of all other bones when delayed union presents itself as a complication.

"Excision of the hip-joint as a systematic operation was successfully, and for the first time, done in this country by Sayre in 1854."

In 1857 Dr. Kinloch reports a case of excision of the hip-joint for morbus coxarius, with remarks on the propriety of such an operation, and a summary of the recorded cases up to that time. Only 40 cases were recorded when he performed his first; 28 were successful, 12 fatal. The case in point proved fatal, but Kinloch warmly urged the operation, and was certainly the first to perform it in South Carolina.

In 1881 Dr. F. L. Parker reports successful excision of the head and six inches of the femur, and in 1886 of the head and six inches of the humerus.

Dr. Manning Simons, recently at the City Hospital, Charleston, successfully removed half of the lower jaw, on account of a large osteo-sarcoma, in a young mulatto girl about four years old, performing laryngotomy as a preliminary step in the operation. Drs. Kinloch, J. S. Buist, Simon Baruch and others have reported cases of removal of these tumors by ordinary methods.

In April, 1890 (*American Journal of the Medical Sciences*), Dr. Middleton Michel reports the only case of "wiring the patella," which has been done in South Carolina.

III. SURGERY OF THE VASCULAR SYSTEM AND NERVES.

In this department very few cases deserving of notice have been found by the writer.

Dr. Michel's successful ligation of the subclavian artery between the scaleni muscles reported in October, 1883 (*American Journal of the Medical Sciences*), but performed in our recent war of 1862 upon a Confederate soldier, is an event worthy of special mention. This artery is usually tied in its third position, and the first successful case of ligation of the first part was achieved only a few months ago by Halsted, of Baltimore. The part between the scaleni is a rare ligation, and the fact that the patient, twenty-six years afterwards, was well and hearty, makes this remarkable case still more interesting and creditable.

Dr. Wm. T. Wragg reports, in 1847, that for ten years he had used deer sinews

for ligatures, remarking upon their good properties of being easily absorbed and of creating little inflammation.

In 1872 Dr. R. W. Gibbes, of Columbia, ligated a large hernia of the omentum, and, cutting off the ends of the ligature, dropped it into the abdomen. This, he claims, is the first time the omentum was treated in this way. I have not been able to verify it.

In 1873 Dr. R. A. Kinloch reports a case of femoro-popliteal aneurism successfully treated by the antiseptic ligature. This, he says, is the first report on an operation of this kind in the United States with the carbolyzed catgut ligature, as taught by Lister and then under trial.

In 1889 Dr. Manning Simons reports "a case of aneurism and arterio-venous aneurism of the femoral artery and vein produced by gun-shot injury—operation and recovery."

This is a rare operation, for the sac, which was about the size of a goose-egg, was entirely excised and ligatures successfully applied to both distal and proximal ends of the femoral artery and vein.

Ligations of most of the larger arteries for aneurism and various other causes have been successfully done by surgeons throughout the borders of our State, but none that I find reported merit mention either for priority in success or in ligation.

In the surgery of the nerves Dr. Francis L. Parker, of Charleston, deserves great credit for having been the first surgeon in the United States, we believe, who obtained reunion of a divided nerve of large size by suture through the continuity of the nerve itself. The case is reported in 1881 and 1883 (Transactions South Carolina Medical Association), as follows: "Paralysis of extensor muscles of forearm and hand from division of the posterior interosseous nerve. Complete recovery by resection and reunion of the ends of the divided nerve with carbolyzed catgut sutures." This operation was done three months after the injury.

In *Gaillard's Medical Journal*, February, 1882 (taken from the *Lancet*), only 40 cases are recorded, and none of these are American. This operation must not be confused with nerve section and nerve-stretching, in which the work of American surgeons is well known.

IV. SURGERY OF THE GENITO-URINARY SYSTEM.

As before quoted, Ramsay was under the impression that renal calculi were rare in South Carolina. Dr. Glover's early lithotomy, previously mentioned, was the first in the State, undoubtedly. Since then 58 operations (lithotomy and lithotripsy) were collected from all parts of the State by Dr. F. L. Parker in 1873, thus disproving this assertion. Next to Dr. Glover, Dr. H. H. Toland, of Columbia, was one of the earliest operators, as Dr. O. B. Mayer, Sr., of Newberry, was one of the most successful. Drs. Benjamin Simons and Eli Geddings were also among the earliest operators in the State.

Dr. Manning Simons, in the *Medical News*, December, 1891, reports "a case of

suppurative pyelo-nephritis consequent upon renal calculus; nephrectomy by laparotomy—recovery.”

The sac left by the removal of the kidney was so large that drainage was provided for by passing a tube entirely through the abdominal cavity, the posterior end emerging between the twelfth rib and the crest of the ilium.

V. MISCELLANEOUS SURGERY.

The operation of excision of the parotid gland is a rare one in the history of surgery, because it is seldom effected and because its anatomical position renders interference with it peculiarly dangerous.

Only two excisions of this gland are recorded in South Carolina. In 1852 Dr. H. H. Toland, of Columbia, removed it successfully on account of a malignant growth so large as to luxate the condyle of the jaw and to render deglutition almost impossible. The external carotid was tied as a preliminary step.

In 1869 Dr. Middleton Michel, of Charleston, removed the gland from a man living in Bishopville for a malignant tumor. Hemorrhage was so great that the common carotid was tied after the growth was excised. Secondary hemorrhage occurring some days later, Dr. Michel tied the carotid lower down again. This patient died of hemorrhage from the seat of the second ligature about thirty-one days after the operation.

“In 1850 Dr. Henry I. Bowditch suggested and practiced paracentesis thoracis, and Dr. Morill Wyman simultaneously performed the same operation. . . . It is almost impossible to estimate the number of lives saved by this operation, but the number is very great, and this operation forms an enduring monument to the fame of American physicians.” In 1889, Dr. F. Peyre Porcher, of Charleston, reports a series of 69 cases in which he had tapped for pleuritic effusion. In this operation he is *facile princeps* in this State, and this large number of cases very properly attests his large experience, as well as his skill in physical diagnosis.

The operation of paracentesis of the pericardium was, according to Professor Roberts, of Philadelphia, only performed sixty times from 1819 to 1880, and only eight times in America during the same period. Dr. Porcher performed successfully one of these eight, which is recorded in Dr. Roberts' book, and reported in the *New York Medical Record*, July, 1878.

Dr. Charles R. Taber, of Fort Motte, in 1882, reports two successful cases, and Dr. C. Kollock another successful one in 1884. These, with two others by Dr. Porcher, complete the history of this operation in South Carolina.

In the literature of extra-uterine foetation there are only a few records, though I am certain laparotomy has been performed for its relief many more times.

The earliest case recorded is that of Dr. John King, in 1816, already mentioned. In 1886 Dr. J. R. Bratton, of Yorkville, reports a case of double uterus and double vagina complicated with post-tubal abdominal foetation. Laparotomy successful one month after diagnosis of pregnancy was made, which is unique.

Dr. John T. Darby, in 1872, gives an account of quite a remarkable case, occurring in the practice of Dr. Lewis, of Lexington, of extra-uterine pregnancy,

in which the foetus was retained for nine years, and in that time a boy and girl had been naturally delivered. What was thought to be an abscess was opened, when a dead foetus presented and was removed. The contents of the stomach emptied through an ulceration into the sac. This was closed with sutures, but was finally the cause of the woman's death. In 1886, Dr. R. Andral Bratton, of Yorkville, operated on "a case of extra-uterine pregnancy of fifteen year's standing; laparotomy—recovery."

This is worthy of mention, too, on account of the length of time the foetus was retained, though there is a case on record extending over fifty-six years.

He writes me that Dr. Strait, of Rock Hill, has also operated on a similar case, which has never been reported.

In 1858, Dr. W. W. Anderson, of Stateburg, reports a case of tetanus cured by amputation of the toe affected.

Dr. F. W. P. Butler, of Edgefield, reports a successful double amputation through the thighs for gangrene.

Dr. B. W. Taylor, of Columbia, reports a unique case of tracheotomy and thyrotomy for malignant growth, in 1876. The case recovered, but death resulted later from a return of the tumor.

In eye surgery, Dr. Francis L. Parker, of Charleston, records in 1883 a case of transplantation of the conjunctiva of the rabbit to the human eye in a case of Symblepharon; successful. Very few cases previous to this had been done in this country, and this was certainly the first in our own State.

Dr. Parker also introduced into the State and performed five times the operation devised by Mules, of Manchester. This consists in suturing into the empty sclerotic an artificial vitreous or glass ball, the object being to retain the natural appearance of the eyeball. The operation is one of the substitutes for enucleation, and succeeds admirably, when, for cosmetic reasons, we wish to insert a false eye, as it preserves all the motions of a healthy globe.

The following is a quotation from Ashurst's Surgery, 1889, page 764: "Exenteration or evisceration of the eye was first introduced among us in America by Prof. Michel, and this was about the same time advocated by Graefe in Halle, by Mules in Manchester, and by Michel, of Charleston, S. C."

Such, then, is the history of surgery in South Carolina, as I have found it recorded in the literature at my command. If anyone who deserves mention has been omitted, it has happened unintentionally.

But this, imperfect though it be, would still be incomplete were I to omit mention of the names of Marion Sims, Gailiard Thomas, and Simon Baruch, of New York; Chisolm and Miles, of Baltimore; Logan, of New Orleans; Gaston, of Atlanta; Nott, of Mobile, and a host of others whom we are proud to claim—men who, reared and nurtured in old Carolina, educated in her own institutions and practicing within her own borders until their brilliant talents demanded a larger sphere of action, have won honor for themselves and their adopted homes, while shedding yet greater lustre upon their native State.

More might and could be told as of great or greater interest than that which time and circumstances have permitted me to relate here in this brief essay.

Enough has been said, however, to show that we have indeed good reason to, and may well be, proud of the place we will occupy in a grand surgical picture, and especially of the share we have contributed to the achievements of American surgery. ;

We have a glorious past, may we only have a more glorious future !



